

A NOTE ON THE DISTRIBUTION OF SOME PLANTS IN GANGANAGAR DISTRICT, RAJASTHAN¹

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A distribution of 25 taxa in Ganganagar district of Rajasthan has been recorded, the majority of which being reported from the State for the first time.

INTRODUCTION

The district of Ganganagar having an area of 20,629 sq. km is situated in the north of Rajasthan State between 28°40'-30°6' N. Lat. and 72°36'-75°30' E. Long. It constitutes a part of the Great Indian Desert. The district is being irrigated by the Gang Canal, Bhakra Canal and Rajasthan Canal which has greatly affected the natural flora of the area in many ways. The irrigation waters which owe their source to the Punjab rivers have been bringing seeds and other propagules of a number of extralimital species year after year and many of these have already become successfully established in the area as crop weeds or along the banks of canals. The most wonderful example of this naturalization of Himalayan plants in the Great Indian Desert are species of *Riccia*, *Marchantia* and *Ophioglossum vulgatum* L. (Singh & Brar 1980) which are found frequently in the canal irrigated areas, showing thereby the extent to which plants from the Himalayas and other places have become naturalised in this irrigated desert.

We are presently working on the flora of North Rajasthan and about 500 species are collected and identified. While studying the specimens, we found some of these were not reported previously from Rajasthan (Blatt.

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& Hallb. 1918-21, Puri *et al.* 1964, Bor 1960, Bhandari 1978, Sharma & Tiagi 1979, Katewa 1979, Aery 1978, Majumdar 1980), therefore, new records for the State. The specimens have been preserved in the Herbarium, Department of Botany, SGN Khalsa College, Sriganganagar (Raj.).

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EHRETIACEAE

Cordia fulvosa Wight. Icon. Vol. 4, 2 (1850): 15, t. 1380; Cooke II: 267.
Fl. & Fr.: April-June.
Spec. & Loc.: Bhiani nursery; Singh & Brar: 755.
Distribution: India (W. Peninsula).

CUSCUTACEAE

Cuscuta capitata Roxb. Fl. Ind. 1: 448, 1932; FBI 4: 227; Nair 176.
Fl. & Fr.: Nov.-April.
Spec. & Loc.: Padampur; Singh & Brar: 759.
Distribution: A temperate weed, co-distributed with *Medicago sativa*.

OROBANCHACEAE

Orobanche aegyptiaca Pers. Syn. 2: 181, 1807; Cooke 2: 387; Duthie 2: 164; Kashyap 190; Nair 194.
O. indica Buch.-Ham. in Roxb. Fl. Ind. 3: 27, 1832; FBI 4: 326.

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Fl. & Fr.: Jan.-March.

Spec. & Loc.: Padampur; Singh & Brar: 784.

Distribution: Central and Western Asia; India (throughout the plains, especially on mustard crops).

POLYGONACEAE

Polygonum lanigerum R. Br. Prodr. 419, 1810, FBI 5: 35; Duthie 3: 34; Nair 231.

Fl. & Fr.: Jan.-June, Oct.-March.

Spec. & Loc.: 'Z' Minor; Singh & Brar: 826.

Distribution: Java, Philippines, Egypt, Tropical and S. America and Africa, Australia, India (Bengal, lower Himalayas, Punjab).

EUPHORBIACEAE

Chrozophora oblongifolia (Del.) A. Juss. Tent. Euphorb. 28, 1824; Kashyap 230; Nair 233.

Croton oblongifolius Del. Fl. Aeg. 139. 1813.

Chrozophora obliqua Juss. loc. cit. 28, 1824; FBI 5: 409; Cooke 3: 104; Duthie 3: 105.

Fl. & Fr.: March-Nov.

Spec. & Loc.: Budhajaur; Singh & Brar: 834.

Distribution: Arabia, N. Africa, India (Punjab, Kashmir).

Euphorbia helioscopia Linn. Sp. Pl. 459, 1753; FBI 5: 262; Kashyap 223; Nair 237.

Fl. & Fr.: Feb.-April.

Spec. & Loc.: Govt. nursery; Singh & Brar: 835.

Distribution: Afghanistan, Westwards to Atlantic, Japan, India (Punjab and Western Himalayas).

Euphorbia serpens H. B. K. Nov. Gen. 2: 52, 1817; Boiss in DC. Prodr. 5(2): 29, 1862; Mitra in J. Bombay nat. Hist. Soc. 68(3): 825-856, 1972. Raizada Suppl. Fl. UGP 1976.

Fl. & Fr.: Dec.-Jan.

Spec. & Loc.: Botanical Garden; Singh & Brar: 526.

Distribution: Java, India (Bengal, Bihar, Madras, Gangetic plains).

Note. Recently Mitra (1972) has pointed out that the plant which was previously known under the names of *E. microphylla* Heyne or *E. bombaiensis* Santapau or *E. orbiculata* H.B.K. is really *E. serpens* H.B.K.

URTICACEAE

Pouzolzia pentandra (Roxb.) Benn. Pl. Jav. Rar. 67, 1838; FBI 5: 583; Cooke 3: 137; Duthie 3: 132; Kashyap 235; Nair 242. *Urtica pentandra* Roxb. A. Ind. 583, 1832.

Fl. & Fr.: Sept.-Nov.

Spec. & Loc.: Gang Canal; Singh & Brar: 527.

Distribution: Afghanistan, Java, China, India (Dehradun, Tropical Himalayas, Punjab, Assam, Khasia Hills, Bengal, Orissa).

MORACEAE

Morus indica Linn. Sp. Pl. 986, 1753; FBI 5: 492; Cooke 3: 159; Duthie 3: 136; Kashyap 235.

Fl. & Fr.: Jan.-April.

Spec. & Loc.: Sohan Lal Baug; Singh & Brar: 540.

Distribution: Temperate and Tropical regions, India (Outer Himalayas, Sub-Himalaya tracts, Bengal, Nilgiri hills, Punjab).

APONOGETONACEAE

Aponogeton natans (Linn.) Engl. & Krause in Pfreich. 24: 11, 1906; Nair 256. *Saururus natans* Linn. Mant. 227, 1771. *A. monostachyus* Linn. f. Suppl. 214, 1781; FBI 6: 564.

Fl. & Fr.: Sept.-Dec.

Spec. & Loc.: Gang canal; Singh & Brar: 549.

Distribution: Warm regions from India and S. China through Malaya to Australia, dominant in Tropical and S. Africa and Madagascar.

POACEAE

Aristida plumosa Linn. Sp. Pl. ed. 2, 2: App. 1666; FBI 7: 228; Bor 411.

Fl. & Fr.: Aug.-Oct.

Spec. & Loc.: 58 GB; Singh & Brar: 573.

Distribution: Mediterranean region, Pakistan, Afghanistan, North-west India.

Catabrosa aquatica (Linn.) P. Beauv. Ess. Agrost. 97, t. 19, f. 8, 1812; FBI 7: 310; Bor 528. *Aira aquatica* Linn. Sp. ed. 1, 64, 1753.

Fl. & Fr.: Aug.-Oct.

Spec. & Loc.: Lyallpur garden; Singh & Brar: 853.

Distribution: Europe, Temperate Asia and North America.

Dichanthium odoratum (Lisboa) Jain et Deshpande in Bull. bot. surv. India 20: 133-135, 1978. *An-dropogon odoratus* Lisboa in JBNHS 4: 123, 1889.

Fl. & Fr.: Throughout the year.

Spec. & Loc.: Gang Canal; Singh & Brar: 904.

Distribution: Bombay State, apparently endemic.

- Digitaria bicornis** (Lamk.) Roem. et Schult. ex Laud., Hort. Bril. 24, n. 1578, 1830; Bor 299. *Paspalum bicorne* Lamk., Tab. Encycl. Math. Bot. 1 : 176, 1791.
Fl. & Fr. : Sept.-Dec.
Spec. & Loc. : Kola Forest; Singh & Brar : 584.
Distribution : Tropical Asia.
- Digitaria stricta** Roth ex Roem. et Schult., Syst. Veg. 2 : 474, 1817; Bor 305.
Fl. & Fr. : Rainy season.
Spec. & Loc. : College campus; Singh & Brar : 592.
Distribution : Tropical Asia, including many parts of India, Burma, Ceylon.
- Diplachne fusca** (Linn.) P. Beauv. Ess. Agrost. 80, 163, 1812; FBI 7 : 329; Bor 492.
Fl. & Fr. : Sept.-Jan.
Spec. & Loc. : River sides; Singh & Brar : 854.
Distribution : Cosmopolitan.
- Eragrostis nutans** (Retz.) Nees ex Steud. Nom. Bot. ed 2 : 563, 1840; Bor 511. *Poa nutans* Retz. Obs. Bot. 4 : 19, 1796.
Fl. & Fr. : Aug.-Oct.
Spec. & Loc. : Gang Canal; Singh & Brar : 862.
Distribution : India (Madras, Bihar)
- Koeleria argentea** Griseb. in Goett. Nachr. 77, 1868; FBI 7 : 309; Bor 444.
Fl. & Fr. : Aug.-Oct.
Spec. & Loc. : Tibbi; Singh & Brar : 594.
Distribution : Alpine Regions of Tibet, and the Himalayas.
- Leptochloa chinensis** (Linn.) Nees in Syll. Ratisb. 1 : 4, 1824; Bor 516. *Poa chinensis* Linn. Sp. Pl. ed. 1, 69, 1753.
Fl. & Fr. : Aug.-Oct.
Spec. & Loc. : Local gardens; Singh & Brar : 865.
Distribution : South-east Asia.
- Lophochloa phleoides** (Vill.) Reichb. Fl. Ger. Excurs. 42, 1830; Bor 445; Maheshw. 402; Nair 283. *Festuca phleoides* Vill. Fl. Delph. 7, 1785.
Fl. & Fr. : Feb.-March.
Spec. & Loc. : College campus; Singh & Brar : 870.
Distribution : From Europe and the Mediterranean region. India (Punjab).
- Panicum austroasiaticum** Ohwi in Act. Phytotax. et Goebot. 2 : 1, 45, 1942; Bor. *P. humile* Nees ex stud. Syn. Gram. 84; FBI 7 : 48.
Fl. & Fr. : Jul.-Oct.
Spec. & Loc. : Govt. nursery; Singh & Brar : 601.
Distribution : Tropics of South-east Asia, also in North Tropical Africa.
- Panicum repens** Linn. Sp. Pl. ed. 2: 87, 1762; Bor 330. *P. ischaemoides* Rate. Obs. Bot. 4 : 17, 1786.
Fl. & Fr. : Sept.-Oct.
Spec. & Loc. : Lyallpur garden; Singh & Brar : 602.
Distribution : Tropical and subtropical areas of both hemispheres.
- Setaria homonyma** (Steud.) Chiov. in Nuova Giorn. Bot. Ital. n. s. 26 : 78, 1919; Bor 361. *Panicum homonymum* Steud. Syn. Pl. Glum. 1 : 48, 1854.
Fl. & Fr. : Aug.-Oct.
Spec. & Loc. : College campus : Singh & Brar : 871.
Distribution : India and East Tropical Africa.
- Sporobolus indicus** auctt. (*non* Linn.) R. Br.; Bor 630.
Fl. & Fr. : Dec.-March.
Spec. & Loc. : Padampur; Singh & Brar : 876.
Distribution : Ceylon, most warm countries, throughout India.
- Sporobolus stocksii** Bor in Kew Bull. 45, 1948: Bor 633. *S. ioclados* Hook. f. FBI 7 : 249.
Fl. & Fr. : Aug.-Nov.
Spec. & Loc. : Karanpur; Singh & Brar : 907.
Distribution : Pakistan (Sind), India.

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